

CLAIMS

1. A method for manufacturing a temperature probe including a cable consisting of at least a pair of conducting wires insulated by respective sheaths which end with an exposed length where a sensor is soldered, said method ending with the covering of said sensor and exposed length of wires by overmoulding with a thermoplastic material same as or compatible with the material of said insulating sheaths, characterized in that said final overmoulding step is preceded by a step where the sensor and exposed length of wires are introduced into a covering element.

2. A method according to claim 1, characterized in that in case the cable is provided with an outer sheath enclosing the insulating sheaths of the conducting wires the step where the sensor and exposed length of wires are introduced into a covering element consists in sliding the outer sheath along the insulating sheaths until it encloses the sensor, the end portion of said outer sheath acting as covering element.

3. A method according to claim 1, characterized in that the step where the sensor and exposed length of wires are introduced into a covering element consists in introducing them into a covering tube, and in that said step is followed by a step where said tube is placed and blocked in the mould so as to prevent its movement during the injection of the thermoplastic material.

4. A method according to claim 3, characterized in that in the step where the sensor and exposed length of wires are introduced into a covering tube the latter is also slipped on the cable.

5. A temperature probe including a cable (C) provided with at least a pair of conducting wires (F) insulated by respective sheaths (P) and ending with an exposed length where a sensor (S) is soldered, which together with said exposed length of wires (F) is enclosed by a covering overmoulded with a thermoplastic material (M) same as or compatible with the material of said insulating sheaths (P), characterized in that said covering further includes a covering element which encloses said sensor (S) and the exposed length of wires (F).

6. A temperature probe according to claim 5, characterized in that the

- 6 -

cable (C) includes an outer sheath (G) enclosing the insulating sheaths (P) and in that the covering element is the end portion of said outer sheath (G).

7. A temperature probe according to claim 5, characterized in that the covering element is a covering tube (N; L).

5 8. A temperature probe according to claim 7, characterized in that the covering tube (L) is sufficiently long to be slipped on the cable (C).

9. A temperature probe according to claim 7 or 8, characterized in that the covering tube (N; L) is a tube with at least two layers consisting of at least an outer material (N'; L') and an inner material (N''; L'') coupled so as to form a single
10 element.